Amendment to Claims

This listing of Claims will replace all prior versions and listings of claims in this Application.

Listing of Claims

Claim 1. (ORIGINAL) A method for correcting misregistration of scanned thin line character components, comprising:

detecting a misregistered pixel;

determining whether the misregistered pixel is part of a character;

applying a three-dimensional color vector determinant to the misregistered pixel; and

reducing the chrominance component of the misregistered pixel to provide a corrected pixel.

Claim 2. (ORIGINAL) The method of claim 1 wherein said detecting include identifying a pixel as being at an edge of an image portion.

Claim 3. (CURRENTLY AMENDED) The method of claim 2 wherein said identifying includes identifying a pixel as being at an edge of an image portion using a gradient edge detector, including selecting an image kernel filter, having integer values ~~GTE~~ greater than or equal to -2 and ~~LTE~~ less than or equal to +2, including zero, setting a predetermined threshold, comparing the image filter kernel to the predetermined threshold, and classifying the pixel as a misregistered pixel ~~IFF~~ if and only if the image filter kernel is greater than the predetermined threshold.

Claim 4. (ORIGINAL) The method of claim 1 wherein said determining includes checking the gradient and checking the luminance of a pixel.

Claim 5. (ORIGINAL) The method of claim 1 wherein said reducing includes reducing the chrominance component of the misregistered pixel to provide a corrected pixel with a fuzzy chrominance reduction function.

Claim 6. (ORIGINAL) The method of claim 1 which further includes locating an edge pixel position and classifying the edge position pixel as a text region.

Claim 7. (ORIGINAL) A method for correcting misregistration of scanned thin line character components, comprising:

detecting a misregistered pixel, including identifying a pixel as being at an edge of an image portion;

determining whether the misregistered pixel is part of a character, including checking the gradient and checking the luminance of a pixel;

applying a three-dimensional color vector determinant to the misregistered pixel; and

reducing the chrominance component of the misregistered pixel to provide a corrected pixel.

Claim 8. (CURRENTLY AMENDED) The method of claim 7 wherein said identifying

includes identifying a pixel as being at an edge of an image portion using a gradient edge detector, including selecting an image kernel filter, having integer values ~~GTE~~ greater than or equal to -2 and ~~LTE~~ less than or equal to +2, including zero, setting a predetermined threshold, comparing the image filter kernel to the predetermined threshold, and classifying the pixel as a misregistered pixel ~~IFF~~ if and only if the image filter kernel is greater than the predetermined threshold.

Claim 9. (ORIGINAL) The method of claim 7 wherein said reducing includes reducing the chrominance component of the misregistered pixel to provide a corrected pixel with a fuzzy chrominance reduction function.

Claim 10. (ORIGINAL) The method of claim 7 which further includes locating an edge pixel position and classifying the edge position pixel as a text region.

Claim 11. (CURRENTLY AMENDED) A method for correcting misregistration of scanned thin line character components, comprising:

detecting a misregistered pixel, including identifying a pixel as being at an edge of an image portion, wherein said identifying includes identifying a pixel as being at an edge of an image portion using a gradient edge detector, including selecting an image kernel filter, having integer values ~~GTE~~ greater than or equal to -2 and ~~LTE~~ less than or equal to +2, including zero, setting a predetermined threshold, comparing the image filter kernel to the predetermined threshold, and classifying the pixel as a misregistered pixel ~~IFF~~ if and only if the image filter kernel is greater than the predetermined threshold;

determining whether the misregistered pixel is part of a character, including checking the gradient and checking the luminance of a pixel;

applying a three-dimensional color vector determinant to the misregistered pixel; and

reducing the chrominance component of the misregistered pixel to provide a corrected pixel.

Claim 12. (ORIGINAL) The method of claim 11 wherein said reducing includes reducing the chrominance component of the misregistered pixel to provide a corrected pixel with a fuzzy chrominance reduction function.

Claim 13. (ORIGINAL) The method of claim 11 which further includes locating an edge pixel position and classifying the edge position pixel as a text region.